

XXVII.—*Descriptions of new Neotropical Mammals.*
By OLDFIELD THOMAS.

Tylomys miræ, sp. n.

Slightly larger than any of the other species. Fur close and thick, the hairs about 20–23 millim. in length on the back. General colour above dark cinereous grey, with a slight tinge of fawn; sides more grey and less fawn. Head like body, area round eyes not darker. Ears apparently rather small, naked, grey. Under surface white throughout, the line of demarcation not very sharply defined; on the belly the white narrows, and some of the hairs have a slight greyish tinge at their bases. Arms grey externally, white internally; legs grey nearly all round, but with a narrow line of white running down to the ankles; upper surface of hands and feet chocolate-brown, the terminal phalanges of digits and hairs at the bases of the claws white. Terminal half of tail white, the junction of the dark and white fairly abrupt all round, little mottled.

Nasals narrow, pointed posteriorly, scarcely surpassed by the premaxillæ; supraorbital ridges with a definite postorbital angle, from which point they run nearly straight backwards to the outer corners of the interparietal, and are but little curved outwards in the parietal region.

Dimensions of the type (an adult male, measured by collector in the flesh):—

Head and body 230 millim.; tail 266; hind foot (s. u.) 41; ear 28.

Skull: greatest length 54; basilar length from henselion 42·5; greatest breadth 28; nasals, length 19; interorbital breadth 11; breadth across most distant points of parietal ridges (at postorbital processes) 20; palate length from henselion 22·2; diastema 15; length of upper molar series (teeth much worn) 8·8.

Hab. Paramba, River Mira, N. Ecuador, altitude 1100 m.

Type B.M. no. 99. 8. 25. 1. Collected by R. Miketta, 27th April, 1898.

Three specimens examined, of which the first (an immature female) was collected by Mr. W. F. H. Rosenberg on March 4, 1897, also at Paramba.

Tylomys Watsoni, sp. n.

Size medium. Fur straight and glossy, about 15 millim. long on the back. General colour above, both on head and

back, dull rufous fawn, finely lined with blackish; muzzle, cheeks, and sides greyer and paler. Region between eye and ear blackish. Ears large, naked, grey. Underside of neck, throat, chest, and inner sides of fore limbs white; belly and inner sides of hind limbs dirty whitish buff, the hairs grey basally, whitish terminally. Metapodials brown above, but their inner edges and the whole of the digits white. Tail dark for its basal and white for its distal half, but the junction of the colours is very irregularly mottled, the dark mottling extending above towards the end, while the white extends below more towards the base of the tail.

Skull broad and heavy, much broader and heavier than in *T. panamensis*. Nasals almost parallel-sided, square-ended posteriorly, decidedly surpassed by the premaxillæ; supra-orbital ridges well-developed, diverging evenly and broadly outwards, without postorbital projection, the parietal portion strongly convex outwards, so that the broadest place on the ridges is just behind the zygomatic root instead of in front of it.

Dimensions of the type (an adult female, measured by collector in the flesh):—

(Total length 493 millim.*) Head and body 250; tail 243; hind foot s. u. 35, c. u. 38*.

Skull: greatest length 54; basilar length from hen-selson 42·5; greatest breadth 26·5; nasals, length 18; inter-orbital breadth 10·5; breadth across most distant points of parietal ridges (near middle of parietal) 20·5; palate length from henselson 22·2; diastema 15·3; length of upper molar series 8·4.

Hab. Bogava, Chiriqui, N.W. Panama, alt. 250 m.

Type collected Sept. 6, 1898, by H. J. Watson. Original number 7. Two specimens examined, adult and young. "Caught on banks of river."

This handsome *Tylomys* is most nearly allied to the Guatemalan *T. nudicaudatus*, Pet., but is more rufous, its posterior belly is not white, but soiled greyish, its muzzle and nasal bones are longer and broader, and its parietal ridges are more uniformly and widely bowed outwards.

* As a step towards a greater uniformity in measuring I propose, in agreement with certain of the American zoologists, to record "total length" and the *cum ungue* hind-foot measure for all animals described north of the Isthmus of Panama, while they for their part will give "head and body" and the *sine ungue* foot measure for animals described from beyond North-American limits.

Oryzomys indefessus, sp. n.

Size of *O. galapagoensis*, tail much shorter. Skull markedly different. Fur coarse and shaggy. General colour above dull mouse-grey, heavily lined with black; a slight tinge of fawn in the posterior dorsal region. Face slightly paler than back, no darker markings round eyes. Ears of medium size; a well-marked basal projection on their anterior edge, greyish, the anterior half of their outer surfaces blackish. Under surface greyish white, the hairs everywhere slaty basally, with white tips; line of demarcation on sides not sharply defined. Upper surface of hands and feet white. Tail scarcely longer than the body without the head, well-haired, black above, white below and at the extreme tip.

Skull, as compared to that of *O. galapagoensis*, with a markedly longer and narrower muzzle and with a much narrower interorbital region, the sides of which are evenly concave instead of divergent, so that the least interorbital breadth is at the junction of the olfactory and cerebral chambers, instead of considerably in front of that point. Palatal foramina reaching to the first lamina of *m*.¹. Palate extending some way behind *m*.³.

Dimensions of the type (an adult, measured in skin):—

Head and body 135 millim.; tail 97; hind foot (wet) s. u. 30, c. u. 31.5; ear (dry) 18.

Skull: greatest length 35.3; basilar length from henselion 26.5; greatest breadth 18; nasals 14.5 × 3.6; interorbital breadth 4.3; interparietal 2.9 × 10; palate length from henselion 15; diastema 9; palatal foramina 6.5 × 2.4; length of upper molar series 5.3.

Hab. Indefatigable Island, Galapagos.

Type B.M. no. 99. 8. 28. 1. Collected Aug. 31, 1897, by Messrs. Webster and Harris. Two specimens examined.

This is the third *Oryzomys* described from the Galapagos Archipelago, the first being the original "*Mus galapagoensis*" of Waterhouse*, from which it differs as above mentioned, and the second being *O. Bauri*, Allen†, a species with an even longer tail than *O. galapagoensis*. A bat of the genus *Atalapha* is the only other indigenous mammalian inhabitant of the islands.

Reithrodon fossor, sp. n.

Precisely similar in external appearance to *Akodon macronyx*. Fur soft, about 10 millim. long on the back.

* Zool. Voy. 'Beagle,' Mamm. p. 65 (1839).

† Bull. Am. Mus. iv. p. 48 (1892).

General colour above soft fawn-grey, uniform on head and back. Under surface greyish white, fairly well defined, the basal two thirds slaty, the tips dull white. Ears short, about as in ordinary Akodons, their hairs coloured like the back. Upper surface of hands and feet white; pollex with a stout claw; other fingers with long powerful claws quite similar to those of *Akodon megalonyx* and *macronyx* and quite unlike the feeble claws of the other Reithrodons; claws on toes large, but far smaller than those on fingers; fifth hind toe, without claw, reaching to the middle of the first phalanx of the fourth. Tail about half as long as the trunk, well-haired, pale fawn above, white on the sides and below.

Skull, though larger and heavier, on the whole most nearly allied to that of *R. chinchilloides*, the type of the "*Euneomys*" section of the genus. Nasals decidedly expanded anteriorly, just surpassing the premaxillæ posteriorly; supraorbital edges square, not ridged, their anterior end marked by a slight projection, like, though too far forward to be, a rudimentary postorbital process; fronto-parietal suture evenly curved; interparietal broad, its anterior edge slightly concave forwards; anterior zygoma-root almost as in *R. chinchilloides*, but with a *slight* concavity on its front edge where the deep undercutting occurs in the other species; palatal foramina widely open anteriorly, reaching back to the level of the front of *m.*¹; palate ending just behind *m.*³; pterygoid fossæ shallow.

Incisors, both upper and lower, very broad, the grooves on the former well defined. Molars broad and powerful.

Dimensions of the type (an adult specimen, measured in skin):—

Head and body 119 millim.; tail 53; hind foot (wet) s. u. 22, c. u. 25; longest fore claw (above) 6·3.

Skull: greatest length 35; basilar length from henselion 29; greatest breadth 20·5; nasals 16 × 6; interorbital breadth 4·4, interparietal 3·1 × 10·5; palate length from henselion 17; diastema 10; anterior palatine foramina 8·5; length of upper molar series 6·5.

Hab. Salta Province, N. Argentina.

Type B.M. no. 99. 2. 22. 25*. Presented by the La Plata Museum through Dr. F. P. Moreno.

This most interesting new form bears to the other Reithrodons precisely the relation that *Akodon megalonyx* and *macronyx* do to the other Akodons, being similarly more

* The skull should be taken as the type if it were hereafter shown not to belong to the skin; but it was extracted in the Museum on arrival, so that any mistake seems quite impossible.

highly specialized, by the great development of its claws, for a fossorial life.

Moreover, its external resemblance to *A. macronyx*, inhabiting the same districts, amounts practically to identity, there being absolutely no single character, of size, proportions, or colour, which would make the keenest-eyed "splitter" suppose that the skin of *R. fossor* did not belong to *Akodon*, though in the skull the difference is complete. We have therefore here the striking phenomenon of a large genus like *Akodon* with a few specialized fossorial species, and another smaller genus, with its similarly fossorial species exactly mimicking the corresponding species of the larger group. No doubt the resemblance is not true mimicry in the technical sense, being presumably due to identity of life and local conditions, but it is very striking nevertheless.

In this connexion attention may be called to the resemblance of *Reithrodon Alstoni* to *Sigmodon*, mentioned in the original description of the former *, a resemblance so close as again almost to amount to identity so far as external appearance is concerned.

Echimys decumanus, sp. n.

Size medium. Spines practically confined to the dorsal surface, the fur on the sides being only hispid, not spinous; strongest spines of back about 20-25 millim. in length and 0.6-0.8 millim. in breadth; greyish white basally, black terminally. General colour above coarsely grizzled sandy fawn, not unlike that of bright pale-coloured specimens of *Mus decumanus*, greyer anteriorly, more fawn-coloured posteriorly. Spinous area along back rather darker, owing to the black tips of the spines, sides paler and greyer. Face grizzled grey, with less tinge of fawn than the back; patch between eye and ear brownish grey. Underside and inner sides of forearms and hips pure white, the hairs white to their bases; upper surface of hands and feet also white or with a slight wash of greyish fawn. Tail uniformly thinly haired, the hairs not hiding the scales, not tufted or pencilled, black above and white below.

Nasals surpassing premaxillæ by about one sixth of their length; supraorbital edges less heavily ridged than in some of the allied species; posterior extension of ridges interrupted on parietals; sides of anterior palatine foramina markedly convex outwards; pterygoids much twisted, narrower and

* P. Z. S. 1880, p. 693.

less spatulate than in *E. semispinosus*; bullæ much swollen, considerably larger than in the latter species.

Dimensions of the type (an adult female, measured by collector in the flesh):—

Head and body 235 millim.; tail 153; hind foot (s. u.) 48; (ear of another specimen 27).

Skull: greatest length 56; basal length 47; basilar length to henselion 40·2; zygomatic breadth 28; nasals 20·5 × 6·3; interorbital breadth 11·7; greatest spread of parietal ridges 21; palate length from henselion 19·2; diastema 11·4; length of upper molar series 9·5.

Hab. Chongon, Guayas Province, west of Guayaquil, Ecuador.

Type B.M. no. 99. 8. 1. 48. Original number 66. Collected 21st November, 1898, by Mr. P. O. Simons. Five specimens obtained.

This *Echimy*s is closely allied to *E. semispinosus*, Tomes (the original specimens of which seem to have been discoloured by spirit), but may be distinguished by its shorter nasals, less heavily ridged supraorbital and parietal regions, narrower pterygoids, and larger bullæ.

Coendou quichua, sp. n.

Similar in general characters to *C. bicolor*, Tschudi*, but smaller and with much shorter spines, which are mostly white-tipped.

General covering mainly spinous, but not, as in *C. bicolor*, entirely so, as there are on the upper surface a number of fine black hairs intermixed with the spines, and of about the same length as the latter. Spines of upper surface about 35–50 millim. in length, longer, as usual, along the centre of the back, shorter elsewhere; the diameter of the thickest about 1·2 to 1·4 millim.; in colour they are pale whitish yellow for from one half to two thirds their length, then black, with the terminal 3–5 millim. white, the white giving a markedly speckled appearance to the whole animal, although on the posterior back some of the spines are wholly black-ended. Under surface entirely spinous, the spines being flattened, about 20–30 millim. in length and about $\frac{1}{2}$ millim. or even less in breadth; white basally, then black with a long whitish hair-like end. Muzzle dark brown; whiskers

* Faun. Peruana, Mamm. p. 186, pl. xiv. (1845). I use Tschudi's name for the present, as the identification of the Peruvian species with *C. nycthemera*, Kuhl (Beitr. Zool. p. 71, 1820)—insufficiently described and without locality—seems too uncertain to be accepted.

black; tuft of hair behind ears pale or reddish brown; upper surface of hands and feet black. Tail rather more than half the length of the head and body, its basal third above with variegated spines as on the back, its under surface and middle third above with close black bristles about $\frac{1}{2}$ inch in length; its terminal third above naked.

Skull with rather a longer muzzle and larger teeth than that of *C. villosus*. Nasals parallel-sided, evenly rounded behind.

Dimensions (taken from a re-made skin):—

Head and body 380 millim.; tail 235; hind foot (s. u.) 58.

Skull: greatest length 83; basilar length from henselion 70; greatest breadth 46.6; nasals 27.2×14.5 ; inter-orbital breadth 26.4; palate length from henselion 36.5; diastema 22.4; length of upper molar series 18.5.

Hab. Puenbo, Upper Guallabamba River, Province of Pichincha, Ecuador; altitude about 2500 metres.

Type B.M. no. 99. 2. 18. 17. Killed June 1898. "Found in the bushes."

Three specimens of this distinct porcupine have been presented to the British Museum by Consul L. Söderström, of Quito, to whom we already owe so much of our knowledge of the fauna of that interesting region.

Coendou vestitus, sp. n.

A dark-coloured thickly furred species of very small size. Spines of two sorts.

Size very small, smaller than in any other species except *C. pallidus*, Waterh. Fur very long, soft and thick, far surpassing and hiding the ordinary spines, though in turn surpassed by the long bristle-like ends of the thinner spines. On the head, however, the spines show through the fur. Under surface also thickly furry, without admixture of spines.

Spines, when of normal character, short, the longest scarcely more than an inch in length and about 1.2 millim. in diameter; in colour they are white or pale yellowish white, with their extreme tips (1–2 millim.) black. Mixed with the normal spines are a number of exceedingly long slender spines of a different character, less than half a millimetre in thickness, and tapering off into bristles, which considerably surpass the general body-fur in length and attain a length of 70 millim. or more. The colour of these slender spines is pale yellow for their basal inch, the remainder being black.

Colour of the fur in general blackish brown throughout, above and below, but the specimen is somewhat faded and

may originally have been quite black. The bases of the hairs, however, are paler dull brownish white. Upper surface of hands and feet dark brown. Tail less than half the length of the head and body, its basal half above like the body, the remainder with stiff black bristles.

Skull small, delicate; zygomata slender; nasals surpassing premaxillæ by only about a fifth of their length; no sharply defined ridges on anterior palate.

Dimensions (approximate, taken on dried skin):—

Head and body 290 millim.; tail 130; hind foot (s. u.) 48.

Skull: tip of nasals to bregma (middle of coronal suture) 36; greatest breadth 40·5; nasals 18·8 × 10·5; distance between outer corners of infraorbital foramina 23·5; palate length from henselion 26; diastema 14·8; length of upper molar series (*mp.*⁴, *ms.*¹⁻³) 15.

Hab. Colombia.

Type B.M. no. 54. 6. 26. 1. Purchased of Parzudaki in 1854.

This curious little *Coendou* may be readily distinguished from all other species by its small size, thick fur, uniformly dark colour, and by the presence of the peculiar long slender spines in addition to the normal short ones.

The only known species as small as *C. vestitus* is Waterhouse's *C. pallidus*, of which it might have been thought that this was the non-albinistic form; but a comparison of the skulls shows so much difference as to preclude this possibility, nor has *C. pallidus* more than the normal simple spines.

The type of *C. vestitus* is still rather young, as its premolars have not changed; but its last molars are fully up and in use, and it has evidently reached its full size.

Metachirus opossum melanurus, subsp. n.

Similar in all respects to ordinary Central-American examples of *M. opossum*, but the tail black to the tip.

Dimensions of the type (an adult male, measured in the flesh):—

Head and body 266 millim.; tail 257; hind foot 41; ear 30.

Skull: basal length 67; greatest breadth 38; combined length of *ms.*¹⁻³ 11·1.

Hab. Paramba, Rio Mira, N. Ecuador; alt. 1100 m.

Type B.M. no. 97. 11. 7. 61. Collected April 11, 1897, by Mr. W. F. H. Rosenberg. Five specimens examined.

All the specimens of the Quica opossum either in the *Ann. & Mag. N. Hist.* Ser. 7. Vol. iv. 20

Museum collection or as recorded by various authors from all the localities of its wide range have from 2 to 4 inches of the end of the tail white, contrasting markedly with the black of the rest of the tail; but in four specimens from Paramba and one from Cachavi the tail is wholly black, a difference which, slight as it is, seems to entitle the N. Ecuadorean form to a special subspecific name.

Philander laniger pallidus, subsp. n.

Essential characters of *Ph. l. derbianus*, but much paler and the colour-markings nearly or quite obsolete.

General colour pale grey throughout, extreme examples being almost white all over, but in other specimens the shoulders, sides of neck, and the middle dorsal region are pale rufous, with an indistinct trace of the grey stripe of *Ph. l. derbianus*. Face pale brownish white, the mesial line scarcely perceptible; area below ears whiter. Forearms, scapular region, and sides of hips very pale grey, nearly white; hind limbs also whitish or with a faint trace of the rufous so conspicuous in *Ph. l. derbianus*. Fur of tail whitish grey, not browner terminally; naked part only slightly mottled with dark just close to the furry part.

Dimensions of the type (an old male, measured in the flesh by collector):—

Total length 587 millim.; head and body 289; tail 398; hind foot, s. u. 43, c. u. 45; ear 32.

Skull: greatest length 61; greatest breadth 35; combined lengths of *ms.*¹⁻³ 9.

Hab. Bogava, Chiriqui, N.W. Panama; alt. 250 m.

Type collected by Mr. H. J. Watson, October 12, 1898. Six specimens examined, besides one obtained at Santa Ana, Costa Rica, by Mr. C. F. Underwood, in May 1895, and another at S. José in 1896.

This appears to be a pale inornate race of the ordinary brightly marked *Ph. l. derbianus* of Central America.

Philander laniger guayanus, subsp. n.

General colour pale whitish, broadly washed with ferruginous, markings nearly obsolete. Face dull white, mesial stripe scarcely perceptible. Neck and back uniform pale rusty, the hairs dull whitish subterminally, their tips bright rusty, richest in the centre of the back; a very faint indication of the grey stripe on withers. Sides similar to back, but paler, and the underside also faintly washed with rusty. Arms and legs like back, hands and feet paler. Furry part

of tail dull pale rusty above, paler below; first two or three inches of naked part mottled with brown, the rest white.

Dimensions of type (male):—

Hind foot (wet) 44 millim.

Skull: greatest length 60; basal length 56; greatest breadth 35; combined length of *ms.*¹⁻³ 8·3.

Hab. Balzar Mountains, Prov. Guayas, W. Ecuador.

Type B.M. no. 80. 5. 6. 87. Coll. Illingworth. Two specimens.

The uniform pale reddish colour of these specimens is quite peculiar, but there is sufficient resemblance to it in some of the other Museum Philanders to prevent my making the Guayas form into a full species.

Marmosa Simonsi, sp. n.

A grey medium-sized species with a white tail-tip.

General appearance very like that of *M. sinaloe*, Allen, although very much larger. Colour above soft pale mouse-grey, clearer on the fore back, becoming rather buffy posteriorly. Centre of face pale yellowish white; dark eye-markings broad, strong, black, extending quite to the ears. Lower cheeks, patch behind base of ears, and whole of under surface pale buffy yellow, the hairs on cheeks and chin this colour to their roots, those on the belly slaty basally. A well-marked chest-gland present. Arms and legs like body; hands and feet silvery white above. Tail clothed with body-fur for rather less than half an inch, then practically naked, grey for its basal three fifths or two thirds, white terminally, as in most of the larger species, the two colours more or less mottled at their junction and below.

Skull of about normal proportions; nasals well expanded posteriorly; supraorbital edges with well-defined ridges and pointed postorbital processes; middle and posterior premolars about equal in size.

Dimensions of the type (an adult female, measured by collector in the flesh):—

Head and body 130 millim.; tail 152; hind foot (s. u.) 20; ear 26.

Skull: greatest length 34; basal length 30·5; nasals 14·1 × 4·4; interorbital breadth 5·1; intertemporal breadth 6·4; palate length from gnathion 18·2; breadth between outer corners of *m.*³ 11; combined length of *ms.*¹⁻³ 6.

Hab. Puná, Puná Island, and Guayaquil; altitude little above sea-level.

Type B.M. 99. 8. 1. 20, from Puná. Original number 9. Collected 3rd November, 1898, by Mr. Perry O. Simons.

The specimens from the mainland near Guayaquil do not appear to differ at all from those obtained on Puná Island.

This *Marmosa* has some resemblance to Tomes's *M. Waterhousei*, but that is said to have a pouch in the female and came from the eastern side of the Andes at Gualaquiza.

I have named this pretty opossum, the first-fruit of Mr. Simons's Ecuadorean trip, in his honour, in recognition of the collecting powers he has shown both in Mexico (where he obtained a number of new mammals described by Dr. Allen and myself) and now in Ecuador.

XXVIII.—Notes on Montagu's Hunting-ground, Salcombe Bay. By the Rev. Canon A. M. NORMAN, M.A., D.C.L., LL.D., F.R.S., &c.

[Plate V. figs. 1, 1 a.]

Pereionotus testudo (Montagu). (Pl. V. figs. 1, 1 a.)

1808. *Oniscus testudo*, Montagu, Trans. Linn. Soc. vol. ix. p. 102, pl. v. fig. 5.
 1862. *Pereionotus testudo*, Bate & Westwood, Brit. Sessile-eyed Crust. vol. i. p. 228.
 1862. *Pereionotus testudo*, Bate, Cat. Amphip. Crust. in Brit. Mus. p. 375.
 1864. *Iceridium fuscum*, Grube, "Besch. einiger Amphipoden der Istrichen Fauna," Arch. f. Naturg. 30 Jahrg. p. 209, pl. v. fig. 3 a-f.
 1893. *Pereionotus testudo*, Della Valle, Faun. und Flor. des Golfes von Neapel, Gammarini, p. 559, pl. iii. fig. 7, pl. xxxi. figs. 1-19 p.
 1899. *Pereionotus testudo*, Stebbing, "Amphipoda from the Copenhagen Museum and other sources," Trans. Linn. Soc., Zool. ser. 2, vol. vii. p. 417.

Pereionotus testudo is a very remarkable Amphipod, with the metasome (or pleon) much reduced in proportion to the mesosome (or peræon), and, moreover, the epimera are outspread and horizontal instead of, as usual, nearly vertical; the whole form is thus depressed instead of compressed as in ordinary Amphipoda, and it is not therefore to be wondered at that Montagu assigned it to *Oniscus* and not to *Gammarus*.

Montagu procured his type at Salcombe, and when Bate and Westwood were publishing their work this type was fortunately found to be in the British Museum. From it their figures were taken, and are very characteristic drawings considering that they were made from a specimen which had been preserved dry for fifty-four years.

As yet the species has not been met with in any other part